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### A PAINTBRUSH HOLDER

#### FIELD OF THE INVENTION

This invention relates to a brush holder.

This invention has particular but not exclusive application to a paintbrush holder, and for illustrative purposes reference will be made to such application. However, it is to be understood that this invention could be used in other applications, such as pastry brush holders, mop holders, and wet broom holders.

### **PRIOR ART**

Paint brushes generally fall into the categories of tradesmen's brushes and handymen's brushes. Tradesmen's brushes are of high quality and are relatively expensive. The brushes are cleaned and reused where possible. Some modern coatings often require the use of expensive solvents for clean-up. There is a trade-off between recovering the brush and the cost of cleaning. Other paint systems may only require that the brush be kept solvent or water moist in order to prevent cure-off of the paint in the brush between uses. Cleaned brushes are generally hung up to keep the configuration of the bristles. Handymen's brushes where used in these applications are rarely cleaned and are thus treated as disposable.

The usable life of both tradesmen's and handymen's brushes may be greatly extended by immersion between uses in a solvent. However, the weight of the brush against the tips of the bristles of a brush standing in solvent causes distortion of the brush shape, as does general storage of brushes where the bristle mass is distorted by that storage. One solution is to suspend the brushes in the solvent. However, this requires the provision of hanging means at the right height

2

which compels the storage to be in a fixed position. It may not be usable for brushes of different hanging heights.

#### **DESCRIPTION OF INVENTION**

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This invention in one aspect resides broadly in a brush holder including a housing having front and rear wall portions spaced at their respective side edges by side wall portions, said housing defining an open-topped cavity adapted to receive the bristle portion of a brush, locating means adapted to engage the handle of the brush, an aperture associated with a lower portion of the housing and adapted to admit a solvent, and suspension means whereby the brush holder and brush in assembly may be suspended.

The housing and the locating means may be formed unitarily from a blank of sheet material foldable to form the brush holder.

The sheet material may be a flexible material selected whereby folding provides the brush holder with form stability. Alternatively the material may be a substantially rigid material and has self-hinge lines formed thereon to enable the blank to be foldable. The material may be selected from sheet metal or plastic, coated paper material or the like. Preferably the material is selected to be substantially unaffected by either the paint medium, paint solvent or clean up liquids used for the intended paint system.

The location means may include a suitably configured web formed adjacent the upper edge of one or both of the front and rear wall portions. Such locating means may for example include an opening through which the handle of the brush may pass. In addition or in the alternative, the location means may include a brush handle gripping means selected to secure said brush in a selected position in the housing. For example the gripping means may comprise a series of resilient

3

fingers depending into the opening formed in the web and adapted to receive and retain the brush handle on insertion.

The aperture adapted to admit a solvent may comprise an open bottom of the housing. Alternatively, the aperture may comprise one or more apertures through a wall of the housing.

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The suspension means may includes one or more tabs or the like associated with the upper portion of the housing and having formed therein a hanging hook or hanging loop. Alternatively the suspension means may include a pair of spaced lands about said locating means and adapted to bear on the shoulders of the brush, and wherein the brush and holder in assembly are suspended by the hanging hole of the brush.

In another aspect the present invention resides broadly in a brush holder formed unitarily of sheet material and including a body portion defining a rear wall of the brush holder, a pair of lateral portions each spaced from opposite sides of said body portion by a web defined by a pair of spaced folds, upper and lower closure portions each spaced from opposite ends of said body portion by an end portion defined by a pair of spaced folds thereabout, said upper end portion including an aperture, said lateral and closure portions being adapted to fold up about said folds to form a housing about a paint brush resting on said body portion with the handle through said aperture, and securing means selectively retaining said lateral and closure portions in said folded configuration.

The sheet material may be a flexible material, wherein the pattern and fold parameters, and the folding order and securing means are all selected whereby the housing has sufficient form stability to form a relatively rigid housing for a paintbrush. The material may be selected from sheet metal or plastic, coated

4

paper material or the like. Preferably the material is selected to be substantially unaffected by either the paint medium, paint solvent or clean up liquids used for the intended paint system.

The body portion may comprise a flat region bounded on four sides by the first fold line of each of the pairs of lateral and closure portions. The fold lines may be produced by any suitable means and will be largely dictated by the choice of sheet material. For example for thermoplastic materials the fold lines my take the form of a conventional self-hinge pressed into the material.

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The pairs of lateral and closure portions may be respectively the same or may be different. For example the closure portion having the handle aperture may be a short portion and the other of the pair may be a relatively longer portion. Where the lateral portions differ there may be provided a first of the pair adapted to be folded first to extent substantially over the face of the brush opposed to the face of the brush resting on the body portion, whereupon the other may be relieved over part of its equivalent area since it would not be required to close off the brush surface. However, it is preferred that the folding sequence start with the top and bottom portions, and that at least these portions be adapted to cooperate to substantially overlay the whole of the surface of the body portion and thus cover substantially the whole of the brush major surface.

The aperture may be adapted to further cooperate with tabs provided on an edge of each of the lateral portions to provide the securing means, cooperating where necessary with corresponding slots. Alternatively the securing means may be formed in one or more pairs of the respective portions in the form of a press stud or the like, either self formed or attached by any suitable means, hook-pile fastening or the like.

One or more of the lower portions of the lower regions of the respective portions may be provided with one or more apertures to provide for entry and drainage of thinners or other solvents. By this means the holder may be used to hold brushes in solvent containers.

# 5 BRIEF DESCRIPTION OF THE DRAWINGS

In order that this invention may be more readily understood and put into practical effect, reference will now be made to the accompanying drawings which illustrate a preferred embodiment of the invention and wherein:

FIG. 1 is a view of apparatus in accordance with the present invention, before folding; and

FIG. 2 is a view of alternate apparatus in accordance with the present invention, before folding.

## **DESCRIPTION OF THE EMBODIMENTS**

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In Fig. 1 there is provided brush holder apparatus 10 cut out of flat sheet, solvent resistant, thermoplastic material, and forming a substantially rectangular body portion 11, bounded on its respective long sides by a first lateral portion 12 and a second lateral portion 13. The first lateral portion 12 and second lateral portion 13 are each spaced from the body portion 11 by a web 14 defined by spaced inner 15 and outer 16 thermomechanically formed fold lines.

The body portion 11 is bounded on its respective short sides by a first closure portion 17 and a second closure portion 20. The first closure portion 17 and second closure portion 20 are each spaced from the body portion 11 by respective upper 21 and lower 22 webs each defined by spaced inner 23 and outer 24 thermomechanically formed fold lines.

6

The upper web 21 has an aperture 25 formed therein and adapted to receive the handle of a paint brush, whereby the first closure portion may fold over the shoulder of the brush.

The upper edges of each of the first lateral portion 12 and second lateral portion 13 are provided with an integral tab 26, the tabs 26 being adapted to engage the edge of the aperture 25 to assist in locating the lateral portion 12 and second lateral portion 13 in their folded configuration in use.

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The upper closure portion 17 is thermoformed to provide integral female press stud portions 27. Corresponding thermoformed male press stud portions 30 are provided on the lower closure portion 20, the relative positions of the female 27 and male 30 press stud portions being selected whereby the apparatus is retained in its folded configuration in use.

Solvent/thinners drain holes 31 perforate each of the webs 14 and lower web 22, whereby the holder may in use allow solvent/thinners infusion into the bristle mass of a brush contained in the apparatus.

In use, a paint brush is inserted handle-first through the aperture 25 whereby the bristle mass of the brush overlies the body portion 11. The first lateral portion 12 is then folded over the bristle mass and distorted at the finish to allow its tab 26 to enter the aperture 25 and be partially retained therein by elastic recovery of the material. This is followed by folding the second lateral portion 13 over the first lateral portion and again distorted at the finish to allow its tab 26 to enter the aperture 25 and be partially retained therein by elastic recovery of the material. The second lateral portion 13 is shaped so as to not extend over the edges of the first lateral portion 12 in its folded configuration.

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The upper closure portion 17 is then folded down and held by the user's thumb against the stock of the brush, presenting the female press stud portions 27. The lower closure portion 20 is then folded up over the lateral portion 13 to meet the upper closure portion 17, whereupon the male press stud portions 30 are pressed into engagement with the female press stud portions 27.

In the embodiment of Fig. 2, a brush holder 40 is formed from a sheet polymer blank 41. A central, substantially rectangular body portion 42 is defined between left and right self-hinge fold lines 43 and upper and lower self-hinge fold lines 44. A lower closure portion 45 adjacent the lower fold line 44 is formed adjacent a front closure portion 46 via self hinge fold line 47. The front closure portion 46 is provided with a securing slot 48 the use of which will become apparent hereinafter.

A top closure portion 50 comprises an upper web 51 self hinged at 44 to the body portion 42 and a closure tab 52 self hinged to the upper web 51 at fold line 53. The upper web 51 has a brush handle aperture 54 formed therein and extending between the respect fold lines 53 and 44. The closure tab 52 is cut at 55 to form a securing tongue 56 adapted in use to engage the securing slot 48.

A generally rectangular left closure leaf 57 is adjacent a tapered left wall portion 60 and connected thereto via fold line 61, the inner edge of the left wall portion 60 being hinged to the body portion 42 at 43. The upper edge of the left wall portion is provided with a folding stiffening tab 62. The upper edge of the left closure leaf 57 is provided with an integral hanging tab 63 forming a hanging loop by means of hanging aperture 64.

A right closure leaf 65 is adjacent a tapered right wall portion 66 and connected thereto via fold line 67, the inner edge of the right wall portion 66 being

8

hinged to the body portion 42 at 43. The upper edge of the right wall portion 66 is provided with a folding stiffening tab 70. The upper edge of the right closure leaf 65 is provided with an integral hanging tab 71 forming a hanging loop by means of hanging aperture 72, the hanging tab 71 being adapted in use to overlay the left hanging tab 63 in use such that the respective apertures 64, 72 are aligned.

The right closure leaf is relieved by curved edge 73.

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The lower portions of each of the left 60 and right 66 side wall portions are provided with three solvent apertures 74.

In use, the stiffening tabs 62, 70 are folded in top closure portion 50 folded down at 44 and 53. The handle of a brush is inserted through the aperture 54 until the shoulders of the brush bears on the web 51, and the bristle mass is rested on the body portion 42. The left closure 57 and left side wall portion 60 are folded up about their respective fold lines 61 and 43 to substantially enclose the bristle mass. The right closure 65 and right side wall portions 66 are folded up about their respective fold lines 67 and 43 to substantially enclose the left closure 57. the stiffening tabs 62, 70 pass under the web 51. The hanging tabs 63, 71 are overlaid with the apertures 64, 72 aligned. The lower closure portion 45 and front closure portion 46 are folded up about their respective fold lines 44 and 47 to complete the brush holder. The closure tab 52 overlies the front closure 46 and the securing tongue 56 is flexed to engage the securing slot 48 and retain the apparatus in its in-use form.

Apparatus in accordance with the foregoing embodiments have the advantage that a thin flexible material can provide a suitable brush holder by virtue of the form stability of the folded structure. The apparatus is one-piece, mass producible, cheap and effective. The apparatus may be used on a brush which

9

mat then be hung in the usual manner or rested in a container of thinners or solvent without the bristles being distorted.

It will of course be realised that while the above has been given by way of illustrative example of this invention, all such and other modifications and variations thereto as would be apparent to persons skilled in the art are deemed to fall within the broad scope and ambit of this invention as claimed in the claims appended hereto.